

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 09/807,686
Appellant : LEYDIER, Robert
Filing Date : 04/30/2002
Confirmation No : 2354
Art Unit : 2892
Examiner : ARORA, Ajay
Docket No. : 76.0531
Customer No. : 41754

Mail Stop RCE
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF DR. JEROME DENIS

I, Jerome Denis, Ph. D., declare and say:

That I am a citizen of France, a permanent resident of the United States and I reside at 3510 Greenway St, Austin, TX 78705.

That I graduated in 1982 from Institut de Physique du Globe (IPG) in Paris, France with a Ph.D degree in Geochemistry;

That being a native of France with an advanced degree from a French university I am an expert at the use of technical French;

That from January 1995 until the present I have lived in the United States and worked from January 1995 – December 2004 for Schlumberger Austin Product Center, Austin, Texas as an R&D manager and from January 2004 through the present for Gemalto Inc. as a Product Management Director and Product Marketing Director;

That my education and the 18 years I have lived and worked in the United States using the English language have made me highly competent in the use of technical English;

That from January 1991 – December 1994 I was the Microsensor R&D Manager for Schlumberger Montrouge Research, Montrouge, France where I was active in the development of silicon-based sensors and I am there from an expert in the field of bonding silicon wafers in the construction of electronic devices such as integrated circuit devices;

That from my aforementioned experience as Microsensor R&D Manager, I am an expert on the vocabulary in both French and English relevant to bonding silicon crystals and related structures;

That the French word *sceller* – used in the '428 application as the derived words *scellée* and *couche de scellement* – has several dictionary definitions including, for example:

- Fermer hermétiquement.
- Fixer une pièce dans une cavité, notamment une pièce de métal dans une maçonnerie, à l'aide d'une substance dont on remplit l'espace restant et qui y durcit

That the first of these two definitions corresponds to the common English language definition:

- To close securely to prevent leakage or hermetically seal

That, significant to the present patent application, the second of the two French language definitions translates into the English:

- Attach a piece in a cavity, including a piece of metal in masonry, with a substance that fills the remaining space and which hardens

That, in my experience, this second meaning of the French word “sceller” is not commonly used in the English language;

That in the French-language equivalent of the present patent application the following sentences appear:

“La face active 13 est cependant couverte d'une couche complémentaire 14 de silicium scellée à ladite face 13 par une couche de scellement 15. Le couche complémentaire 14 comporte une face de dessus 18 et une face de dessous 19 en contact avec la couche de scellement. Les couches de scellement 15 et complémentaire 14 recouvrent avantageusement la totalité ou alors une grande partie de la face active 13 de la puce 5 à l'exception des plots 8 de contact qui restent accessibles au travers d'ouvertures 16 ou vias ménagées dans lesdites couches 14 et 15.” (PCT/FR99/02428, Page 5, Lines 8 – 15).

That in the present U.S. Pat. Appl. 09/807,686 these were translated as:

“However, the active face 13a is covered in an additional layer 14 of silicon which is sealed to said face 13a via a sealing layer 15. The additional layer 14 has a top face 18 and a bottom face 19 in contact with the sealing layer. The sealing layer 15 and the additional layer 14 advantageously cover all or at least a major portion of the active face 13a of chip 5a with the exception of the contact pads 8a which remain accessible through openings 16, or “vias”, formed through said layers 14 and 15.” (09/807,686 (Substitute Specification), Page 6, Lines 14 – 19).

That a better translation would be:

“However, the active face 13a is covered in an additional layer 14 of silicon which is bonded to said face 13a via a bonding layer 15. The

Declaration of Dr. Jerome Denis
September 28, 2010

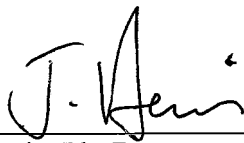
additional layer 14 has a top face 18 and a bottom face 19 in contact with the bonding layer. The bonding layer 15 and the additional layer 14 advantageously cover all or at least a major portion of the active face 13a of chip 5a with the exception of the contact pads 8a which remain accessible through openings 16, or 'vias', formed through said layers 14 and 15."

That other occurrences in the patent application of the words related to the French word *sceller* should be similarly translated;

That the undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patents issuing thereon;

Further declarant saith not.

Date: September 28, 2010

A handwritten signature in black ink, appearing to read "J. Denis", is written over a horizontal line.

Jerome Denis, Ph. D.